

### ABSTRACT OF THE DISCLOSURE

~~According to a first invention, in response to an access from a reader, a~~A tag device causes ~~its~~a second calculator to read a confidential value from a confidential value memory and to apply a second function F2 which disturbs a relationship between elements of a definition domain and a mapping thereof to generate tag output information. The tag device ~~output information is fed to an output section, which then delivers it~~the tag output information to a backend apparatus. Subsequently, a first calculator reads out at least part of elements of the confidential value from the confidential value memory, and applies a first function F1, an inverse image of which is difficult to obtain, and a result of such calculation is used to update a confidential value in the confidential value memory by overwriting.

~~According to a second invention, an updater which is provided externally of a tag device updates privileged ID information stored in a tag device into new privileged ID information, the association of which with the privileged ID information is difficult to follow, at a given opportunity.~~